

SYSTEM AND METHOD FOR SCRUBBING ERRORS IN VERY LARGE MEMORIES

ABSTRACT OF THE DISCLOSURE

Systems and methods for improving scrubbing techniques are provided. In one
5 aspect, the error correction code for a memory line is strengthened by reorganizing
the memory line into distinct portions and providing an error code set that includes a
distinct error code for each portion of the memory line. In another aspect of the
invention, the scan rate is effectively increased by moving memory scrubbing
functionality into the memory system and distributing it among a number of
10 subcomponents that can operate scrubbing functions in parallel. The effective scan
rate increase reduces the probability of failure for any given ECC strength.